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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/274,940	03/23/1999	TIMOTHY CUNNINGHAM	2204/116	9148

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EXAMINER

ABELSON, RONALD B

ART UNIT	PAPER NUMBER
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2666

DATE MAILED: 04/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/274,940

Applicant(s)

CUNNINGHAM ET AL.

Examiner

Ronald Abelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 56-59 is/are allowed.
- 6) ☐ Claim(s) 1-7, 9, 11, 18-26 and 39-43 is/are rejected.
- 7) ☐ Claim(s) 8, 10, 12-17, 27-38, 44-55 and 61 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. Claims 1-7, 9, 11, 18-26, and 39-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Itoi (US 6,456,625).

2. Regarding claims 1, 22, and 39, Itoi teaches a method and apparatus for translating addresses in a communication network having multiple overlapping address domains (fig. 3B box 321). The method comprises receiving an overlapping local address from an inbound address domain ("1120", col. 12 lines 13-16); and translating the overlapping local address from the inbound address domain into a unique global address that is specific to a specified outbound address domain (global IP address of "B", col. 12 lines 32-35).

Regarding claim 60, a communication system including a source host (fig. 3B, box 311) in a source address domain communicating with a destination host (fig. 3B, box 102) in a destination address domain by way of a network address translator (fig. 3B box 321).

The system comprises the source host transmitting to the NAT a packet including a source address equal to the source host

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local address in the source (inbound) address domain ("1120", col. 12 lines 13-16).

The system comprises the NAT translating at least the source address of the packet from the source host local address to a unique source host global address that is specific to the destination address domain (global IP address of B, col. 12 lines 32-35).

Regarding claim 2, selecting the unique global address from among a number of available global network addresses (global IP address of "B", col. 12 line 32) and mapping the unique global address to the overlapping local address ("B-Local", col. 12 lines 52-53).

Regarding claim 3, the step of translating the overlapping local address from the inbound address domain comprises the steps of maintaining and finding are performed by receiving a local telephone number "1120" and mapping it to a specific global address (col. 12 lines 13-16, 32-34).

The step of extracting the unique global address from the address translation entry is performed when the packet reaches the destination node (col. 12 lines 52-54).

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Regarding claims 4 and 5, selecting a network address from among a number of available network addresses (col. 12 lines 32-34); creating an address translation entry having the inbound local address field equal to the local address ("1120", col. 12 lines 13-16), the outbound address domain field equal to the specified outbound address domain ("1120", col. 12 lines 13-16), and the outbound global address field equal to the selected network address (global IP address of "B", col. 12 lines 32-35). Note, the examiner maintains that the telephone # 1120 could be viewed as containing both an area code as well as a local phone number.

Regarding claims 6, 23, and 40, the step of receiving the overlapping local address from the inbound address domain comprises receiving a translation request message. Note, the examiner equates the applicant's receiving a translation request message with Itoi's receiving the packet.

Regarding claims 7, 8 24, 25, 41, and 42, the translation request message includes the overlapping local address and further specifies the outbound address domain. The examiner maintains that the telephone # 1120 could be viewed as containing both an area code as well as a local phone number.

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The examiner equates the applicant's local address with Ito's local phone number and the applicant's outbound address domain with an area code.

Regarding claim 9, transmitting a translation response message including the unique global address. The translation response message could be viewed as the NAT sending the packet to the destination node (col. 12 lines 32-35).

Regarding claim 11, maintaining a number of source address translation entries (fig. 11B); determining the source (inbound) address domain of the packet ("1120", col. 12 line 15); determining the destination (outbound) address domain for the packet and translating the source address in the packet from the overlapping source host local address in the source (inbound) address domain into a unique source host global address that is specific to the destination (outbound) address domain (global "B", col. 12 lines 32-35); and forwarding the translated packet (fig. 3B: see telephone connections to LAN 102).

Regarding claim 18, maintaining a number of translation entries, mapping a destination host global address (global IP address B, col. 12 line 32) that is specific to the source

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address domain ("1120", col. 12 line 34) to a corresponding destination host local address for the corresponding destination address domain (B-Local, col. 12 lines 52-54).

Regarding claims 18-21, see claim 3.

Regarding claims 26 and 43, as previously stated the examiner equates the applicant's unique global address with Ito's (global B), the overlapping local address with Ito's (local B) and the inbound address domain exclusively for the specified outbound domain (area code associated with # "1120").

Allowable Subject Matter

3. Claims 56-59 are allowed.

4. Claims 8, 10, 12-17, 27-38, 44-55, and 61 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter.

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Regarding claim 56, nothing in the prior art of the record teaches or fairly suggests transmitting from the source host a packet containing a destination address equal to a destination host global address to the network address translator, in combination with the other limitations listed in the claim.

Regarding claims 10, 27, 44, and 61, nothing in the prior art of the record teaches or fairly suggests receiving a packet with a destination address equal to a unique destination host global address, in combination with the other limitations listed in the claim.

Regarding claim 12, nothing in the prior art of the record teaches or fairly suggests mapping the overlapping source host local address to the source host global address that is specific to the destination address domain, in combination with the other limitations listed in the claim.

Regarding claim 13, nothing in the prior art of the record teaches or fairly suggests mapping the overlapping source host local address to a unique source host global address that is specific to the destination address domain, in combination with the other limitations listed in the claim.

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Regarding claim 17, nothing in the prior art of the record teaches or fairly suggests determining the source address domain of the packet comprises determining the source address domain for the packet implicitly based upon a network interface over which the packet is received, in combination with the other limitations listed in the claim.

Response to Arguments

6. Applicant's arguments with respect to claims 1-61 have been considered but are moot in view of the new ground(s) of rejection. The examiner agrees with the applicant that Luciani fails to teach translating the overlapping local address from the inbound address domain into a unique global address that is specific to a specified outbound address domain. Therefore a new search was performed.


Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.


Ronald Abelson
Examiner
Art Unit 2666

April 9, 2003



DANG TON
PRIMARY EXAMINER